INNOVATIONS IN OPTICS

LED Projector

LumiBlaze™

Features

- Multispectral
- Highly uniform (non-uniformity ≤ 5%)
- Multiple operational modes: CW, PWM, Pulsed
- Nominal 14" X 14" FWHM far field

Applications

- Flood source illumination
- Hyperspectral and multispectral imaging
- Inspection
- Surface defect detection

Extremely intense and uniform fields at long working distances enable the use of 3D imaging and illumination in vast, well-lit areas including outdoor locations.

The LumiBlaze™ projects intense light that is at least 5X to 10X greater at the same distance than other 'high power' LED projectors. It has outstanding uniformity and power sufficient to enable usage in high-level lighting conditions and can be used singly or in an array to increase the illumination field.

The LumiBlaze™ flood illuminator is uniquely designed for applications that require a highly uniform field of high brightness.

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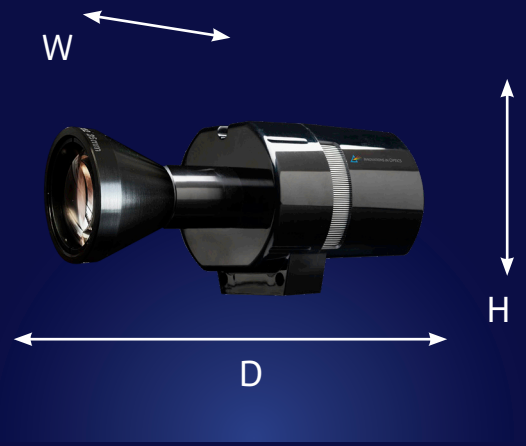
LumiBlaze™ Operating Specifications

Parameter	Specification	Comment
LED Wavelengths	Blue	Peak Wavelength 470nm (typ.)
	White	CCT 4800K (typ.)
	Red	Peak Wavelength 660nm (typ.)
	NIR	Peak Wavelength 860nm (typ.)
	Amber	Peak Wavelength 590nm (typ.)
Drive Current	Continuous 40A max.	Wavelength dependant
	Pulsed 50A max.	30% duty cycle maximum
Forward voltage	Limit: 5.0 V	Requires constant current operation
Total drive power	250 Watts max.	At max drive current
Electrical connector	D-SUB 7W2	Power and comms, internal shielding
Cooling	Forced air	PWM smart control
Operating environment	15°C to 35°C	5% to 85% relative humidity, non-condensing
Operating temperature	-40°C to 40°C	Depending on drive conditions
Size and Weight	155(W) X 92.5 (D) X 95(H) mm, 0.8kg	Without lens attached< 100W power consumption

Dimensions

Height	Width	Depth
95 mm	155 mm	92.5 mm



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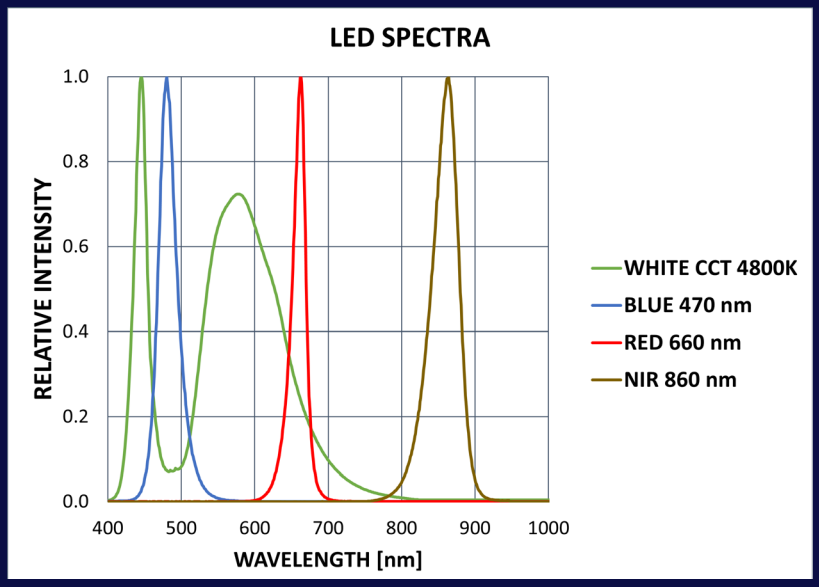
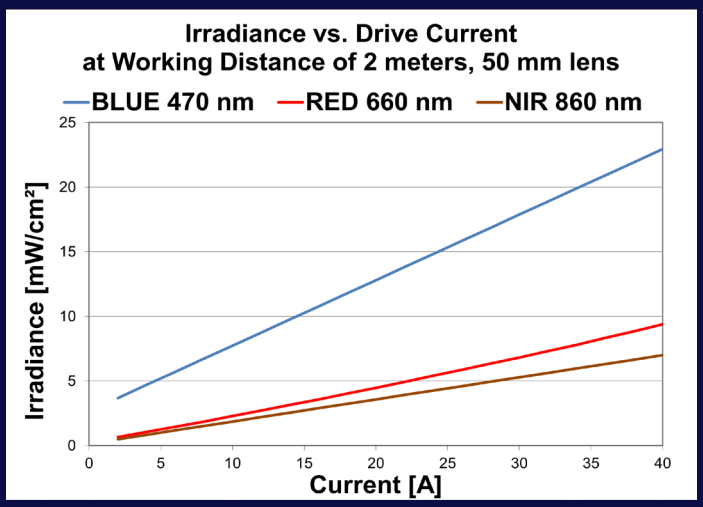
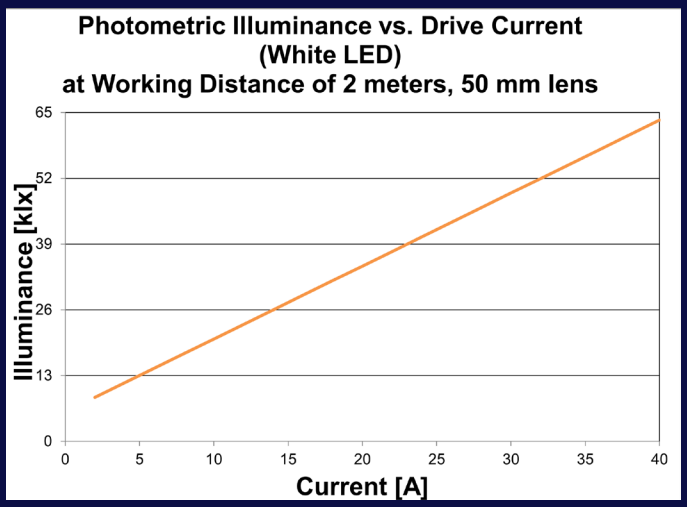
LumiBlaze™ LED Characteristics







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LumiBlaze™ 5000H LED Driver/Controller

Parameter	Specification	Comment
Type	1 Channel constant current, dimmable	Continuous or pulsed by external trigger
Output Voltage	Determined by the LED module	Drive current compliance voltage
Output Current	1 to 40 ADC	Continuous
	50ADC Max	Pulsed/Max 30% Duty Factor
Output Voltage Range	Minimum output voltage	1.2 VDC
	Maximum output voltage	7.0 VDC
Input Voltage	+24 VDC +/- 5%	300W* typical for 40A output (Driver Capability) *Could vary for different light engines
Efficiency	77% typical	At 40A output
Current Ripple	2% (P-P)	At 25ADC output current and 95W output power
Dimming	Analog	Potentiometer
	Digital	via MODBUS
External Trigger	3.3V TTL	User enabled
	50 µsec min pulse width 250 Hz - 2kHz switching frequency	With 1M long driver cable
LED Module I/O	Thermistor in LED Module	Monitoring
	Fan power (24 VDC) and PWM	Cooling, intelligent control
Connectivity	RS_485 (Modbus Protocol)	
Size and Weight	168.3 (W) X 142 (D) X 46.5 (H) MM, 1.0KG	

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